

# Etihad ESCO Retrofit Project

*Energy Efficiency, United Arab Emirates*

## | The challenge

Etihad ESCO is a DEWA venture that was established in 2013 to make Dubai built environment a leading example of energy efficiency for the region and the world. This tender for an Energy Savings Performance Contract (ESPC) aimed at selecting a private partner to deliver guaranteed energy savings for 157 Jebel Ali Freezone (JAFZA) buildings through an energy retrofit program.

A statement from HE Sultan Ahmed Bin Sulayem, Chairman of DP World and Ports, illustrates the size of the challenge:

“The utility cost is the second largest expense for JAFZA. The power and water consumption level in JAFZA crossed 75 million KWh and 750 million IG per year respectively.”

## | Enova's solution

Under this comprehensive results-based contract, adopting our 3-step approach (audit, implementation and guarantee), Enova commits to a 30% savings on the electricity and water consumption across the 157 buildings, making of this project the largest ESPC ever signed in the Middle East and one of the largest ever signed around the world in a single contract. The scale of the project also makes it the first third-party financed ESPC in Dubai, financed through Shari'a compliant financing.

The implementation of Energy Conservation Measures includes:

- Replacement of 5,000 air conditioning units
- Upgrade of 6,000 air conditioning units
- Replacement of nearly 84,000 lamps in the buildings
- Replacement of 1,500 streetlights



Dubai, United Arab Emirates



### Contract

Date: 2016

Type: EPC

Sector: Electricity and water utilities

**157**

buildings

**6**

Energy Conservation Measures implemented

**30%**

guaranteed savings on electricity and water consumption

**132 million AED**

energy savings guaranteed over 6 years

- Installation of 34,500 water saving devices
- Installation of more than 500 meters to monitor and control the energy consumption
- Operation and Maintenance of all equipment installed for the duration of the contract

## | Benefits

- 26.4 GWh electricity saved per year, equivalent to the annual consumption of 2,400 UAE inhabitants.
- Reduction of 18,500 tons of CO<sub>2</sub> emissions per year, equivalent of planting a forest a third the size of Paris.
- 1.2 billion IG water saved over 6 years, equivalent to a swimming pool the size of a football pitch and the height of Burj Khalifa.
- More than 132 million AED energy savings guaranteed over 6 years.

JAFZA does not only benefit from being positioned as a leader in delivering low carbon footprint infrastructures, but can also communicate on financial, environmental and social KPIs placing them in line with the UAE's Energy Efficiency Strategy.

The project is also an outstanding example demonstrating the high-quality operations and maintenance program leading to guaranteed savings creates more value and financial benefits for customers rather than cost cutting on maintenance costs.

“As a pioneering Freezone and top business hub, we felt the urgent need to make our old commercial and residential buildings more energy efficient. As a result, EZW and Etihad ESCO, a subsidiary of DEWA, developed a detailed technical scope for an Energy Conservation Project and invited top licensed and certified specialists to participate in this mega project in JAFZA. After a rigorous tendering and selection process we selected Enova for their viable Energy Conservation Measures (ECMs) to achieve the savings.”

**HE Sultan Ahmed Bin Sulayem**  
Chairman of DP World and Ports



**26.4 GWh**  
electricity saved  
per year



**1.2 billion IG**  
water saved  
per year



**18.5 tons of CO<sub>2</sub>**  
emissions reduction